PLUS 4/9/04

Butler, Douglas

From:

PLUS

Sent:

Wednesday, April 07, 2004 9:22 AM

To:

Butler, Douglas

Subject: .

PLUS Results for 10724759

Here are the PLUS search results for 10724759.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.















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10724759 LIST

PLUS Search Results for S/N 10724759, Searched April 07, 2004

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5868315	6075428	4770089
6170522	6155607	4853057
4432080	6161514	4878467
4491225	6286820	4888095
5213167	6536635	4925469
5400860	6595318	4979629
5664478	6619523	4985121
5796061	5923750	5023925
5851269	5203455	5178327
5947738	5964194	5189255
4267855	6112752	5197081
4268945	6241219	5217697
4289014	4289079	5275290
4294324	4325151	5294014
4332427	4398499	5310160
4374606	4432668	5332393
4384847	4767262	5344183
4392632	5007403	5378014
4404831	5209471	5389065
4414443	5225258	5410459
4415949	5634766	5426933
4429633	5700689	5477819
4461430	5743708	5486154
4466646	5782116	5546075
4469047	6076494	5545559
4505597	6234132	5632565
4530224	6371240	5655642
4599884	4261931	5716110
4850263	4265839	5741128
4854555	4270692	5768909
4919547	4277014	5771302
4957028	4279373	5823889
4986764	4280651	5827385
5214241	4280649	5864190
5225631	4295034	
5238160		5922252
	4294589	5944494
5305930	4317224	5954113
5318262	4318067	5985482
5362065	4351451	6019638
5387780	4388785	6085664
5442915	4400010	6095886
5448831	4449270	6105484
5454254	4466888	6142887
5487495	4475759	6182464
5511433	4497628	6192762
5516260	4540911	6199415
5560280	4572375	6244977
5695350	4583932	6322056
5737925	4604876	6379241
5746612	4607499	6418565

10724759_EAST

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10724759_CLS

Most Frequently Occurring Classifications of Patents Returned From A Search of 10724759 on April 07, 2004

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Original Classifications
  4 206/.5
  3 415/115
     70/209
  2
  2 123/184.42
    173/162.2
  2 280/728.3
  2 435/290.1
  2 439/139
  2 473/374
Cross-Reference Classifications
  5 239/59
  4 229/120
  4 239/57
    123/184.61
  3
  3 229/125.125
  2
     70/226
  2
    92/130A
  2
    92/63
  2
    162/374
  2
    174/35R
  2
    220/239
    220/592.27
    229/125.19
    242/566
  2
    261/DIG 88
  2
    267/122
  2
    267/64.27
  2
    277/653
  2
    277/919
  2
    277/920
  2
    277/921
  2
    280/741
  2
    415/191
  2
    415/209.2
  2
    415/209.3
  2
    473/354
  2
    473/370
  2
    473/606
  2
    524/908
  2
    525/232
  2
    525/236
  2
    525/237
  2 D23/366
Combined Classifications
 5 239/57
5 239/59
 4
    206/.5
    229/120
     92/63
    123/184.61
    229/125.125
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280/728.3

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415/115
   473/606
2
   70/209
2
    70/226
    72/148
2
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   92/130A
   92/48
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2 102/531
  123/184.42
2
  123/184.47
2
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  162/352
2
  162/374
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  173/162.2
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  174/35GC
  174/35R
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  220/239
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  220/592.27
2
  229/125.19
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  239/56
2
  242/566
  261/DIG 88
  267/122
  267/64.21
  267/64.24
  267/64.27
  277/646
  277/653
  277/919
  277/920
  277/921
2
  280/732
2
  280/741
2
  384/100
2
  415/191
2
  415/209.2
2
  415/209.3
2
  435/290.1
2
  439/139
2
  473/354
2
  473/370
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  473/374
2
  524/908
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  525/232
2
  525/236
2 525/237
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2 D23/366

Titles of Most Frequently Occurring Classifications of Patents Returned From A Search of 10724759 on April 07, 2004

```
5 239/57
                (1 OR, 4 XR)
                239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
       Class
        239/34
                      SLOW DIFFUSERS
        239/57
                      .With support for porous or apertured encasing
                         means
                 (0 OR, 5 XR)
5 239/59
                239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
        Class
                      SLOW DIFFUSERS
        239/34
        239/58
                      .With means to adjust casing porosity or
                          openings
                      .. By alignment of apertured members
        239/59
  206/.5
                (4 OR, 0 XR)
        Class
                206 : SPECIAL RECEPTACLE OR PACKAGE
        206/.5
                      INFUSION CONTAINING
  229/120
                (0 OR, 4 XR)
        Class
                229 : ENVELOPES, WRAPPERS, AND PAPERBOARD BOXES
                      PAPERBOARD BOX
        229/100
        229/120
                      .With venting or ventilation means
3
    92/63
                 (1 OR, 2 XR)
        Class
                092 : EXPANSIBLE CHAMBER DEVICES
        92/61
                      RELATIVELY MOVABLE WORKING MEMBERS
        92/62
                      .First working member moves second coaxial
                          working member through separating abutment surfaces
        92/63
                      ..With separate biasing means for a working
                         member
                (0 OR, 3 XR)
3 123/184.61
                123 : INTERNAL-COMBUSTION ENGINES
        Class
        123/184.21
                      INTAKE MANIFOLD
        123/184.61
                     .Manifold material or composition
                (0 OR, 3 XR)
 229/125.125
                229 : ENVELOPES, WRAPPERS, AND PAPERBOARD BOXES
        Class
        229/100
                      PAPERBOARD BOX
                      .With closure for an access opening
        229/124
                      .. Nonunitary closure (i.e., not of one-piece
        229/125.01
                           construction with the box)
                      ...Laterally slidable closure element (i.e.,
        229/125.12
                          slides across access opening)
                      ....Sleevelike closure element
        229/125.125
                 (2 OR, 1 XR)
3 280/728.3
                280 : LAND VEHICLES
        Class
                      WHEELED
        280/29
        280/727
                      .Attachment
        280/728.1
                      .. Inflatable passenger restraint or confinement
                          (e.g., air bag) or attachment
        280/728.3
                      ...Deployment door
3 415/115
                 (3 OR, 0 XR)
        Class
                415 : ROTARY KINETIC FLUID MOTORS OR PUMPS
```

415/115 WITH PASSAGE IN BLADE, VANE, SHAFT OR ROTARY
DISTRIBUTOR COMMUNICATING WITH WORKING FLUID

3 473/606 (1 OR, 2 XR)

Class 473 : GAMES USING TANGIBLE PROJECTILE

473/569 PROJECTILE, PER SE; PART THEREOF OR ACCESSORY

THEREFOR

473/604 .Having hollow core or bladder enclosed within

cover (e.g., basketball, soccer-ball, tennis ball, etc.)

473/606 ... Cover is composed of feltlike, napped, or cloth material (e.g., tennis ball, etc.)

2 70/209 (2 OR, 0 XR)

Class 070 : LOCKS

70/57 SPECIAL APPLICATION

70/174 .For control and machine elements

70/207 ...Handle, handwheel or knob

70/209 ...Rotary or swinging

2 70/226 (0 OR, 2 XR)

Class 070 : LOCKS

70/57 SPECIAL APPLICATION

70/174 .For control and machine elements

70/225 ..Wheel

70/226 ...Rotation blocking

2 72/148 (1 OR, 1 XR)

Class 072: METAL DEFORMING

72/127 BY DEFLECTING SUCCESSIVELY-PRESENTED PORTIONS

OF WORK DURING BODILY MOVEMENT THEREOF (E.G., FOR COILI

NG,

LEVELLING, CURVING OR TROUGHING MATERIAL IN MOVEMENT)

72/146 .To form spiral coil

72/148 ..With core inside coil

2 92/130A (0 OR, 2 XR)

Class 092 : EXPANSIBLE CHAMBER DEVICES

92/130R WITH SEPARATE BIASING MEANS FOR WORKING MEMBER

92/130A .Bias normally held inoperative by fluid pressure

2 92/48 (1 OR, 1 XR)

Class 092 : EXPANSIBLE CHAMBER DEVICES

92/48 PLURAL FLEXIBLE WALL WORKING MEMBERS

2 102/531 (1 OR, 1 XR)

Class 102 : AMMUNITION AND EXPLOSIVES

102/530 JACKETED OR CARTRIDGE GAS GENERATOR

102/531 .For gas-powered tools or means

2 123/184.42 (2 OR, 0 XR)

Class 123: INTERNAL-COMBUSTION ENGINES

123/184.21 INTAKE MANIFOLD

123/184.38 .For in-line engine

123/184.42 ... Manifold having plenum

2 123/184.47 (1 OR, 1 XR)

123 : INTERNAL-COMBUSTION ENGINES Class 123/184.21 INTAKE MANIFOLD 123/184.47 .Manifold having plenum (1 OR, 1 XR) 2 162/352 162 : PAPER MAKING AND FIBER LIBERATION Class 162/232 **APPARATUS** .Running or indefinite length product forming 162/289 and/or treating means .. Flexible endless band type mold (e.g., 162/348 Fourdrinier) ... Means retarding or controlling drainage 162/351 through moldWire bottom scrappers or deflectors 162/352 (0 OR, 2 XR) 162/374 162 : PAPER MAKING AND FIBER LIBERATION Class 162/232 **APPARATUS** .Running or indefinite length product forming 162/289 and/or treating means ..Suction devices 162/363 ...Wear face structures and materials 162/374 (2 OR, 0 XR) 173/162.2 173 : TOOL DRIVING OR IMPACTING Class INCLUDING MEANS TO VIBRATIONALLY ISOLATE A 173/162.1 DRIVE MEANS FROM ITS HOLDER 173/162.2 .Handle type holder (1 OR, 1 XR) 2 174/35GC 174 : ELECTRICITY: CONDUCTORS AND INSULATORS Class ANTI-INDUCTIVE STRUCTURES 174/32 .Shielded or screened 174/35R ..Gaskets, covers 174/35GC (0 OR, 2 XR) 174/35R 174 : ELECTRICITY: CONDUCTORS AND INSULATORS Class 174/32 ANTI-INDUCTIVE STRUCTURES .Shielded or screened 174/35R 220/239 (0 OR, 2 XR) 220 : RECEPTACLES Class 220/200 CLOSURES .Externally adjustable plug or gasket 220/233 220/239 ..Fluid pressure (0 OR, 2 XR) 2 220/592.27 Class 220 : RECEPTACLES RECEPTACLE HAVING MEANS TO FACILITATE 220/592.01 MAINTAINING CONTENTS ABOVE OR BELOW AMBIENT TEMPERATURE (E.G., COMPARTMENT FOR HOLDING A HEAT EXCHANGE MEDIUM) .Thermally insulated receptacle 220/592.2 220/592.27 ..Vacuum insulation (0 OR, 2 XR) 2 229/125.19 229 : ENVELOPES, WRAPPERS, AND PAPERBOARD BOXES Class 229/100 PAPERBOARD BOX

Page 3

.. Nonunitary closure (i.e., not of one-piece

.With closure for an access opening

229/124

229/125.01

construction with the box)

229/125.19 ...Closure includes a depending flange or tab which extends along an adjacent box wall

2 239/56 (1 OR, 1 XR)
Class 239 : FLUID SPRINKLING, SPRAYING, AND DIFFUSING
239/34 SLOW DIFFUSERS

239/53 .Liquid supply in absorbent or porous media only

239/55 ..With enclosing casing

239/56 ...Pad type

2 242/566 (0 OR, 2 XR)

Class 242: WINDING, TENSIONING, OR GUIDING

242/550 UNWINDING

242/566 .With particular guide or guard

2 261/DIG 88 (0 OR, 2 XR)

Class 261 : GAS AND LIQUID CONTACT APPARATUS

261/DIG 88 AROMA DISPENSERS

2 267/122 (0 OR, 2 XR)

Class 267: SPRING DEVICES

267/113 FLUID

267/118 .Expansible-contractible chamber device

267/122 ..Diaphragm or bellows

2 267/64.21 (1 OR, 1 XR)

Class 267: SPRING DEVICES

267/2 VEHICLE

267/64.11 .Comprising compressible fluid

267/64.15 ...With retarder 267/64.16 ...Leveling device

267/64.19Having flexible wall

267/64.21Including rolling lobe between telescoping

members

2 267/64.24 (1 OR, 1 XR)

Class 267: SPRING DEVICES

267/2 VEHICLE

267/64.11 .Comprising compressible fluid

267/64.15 ..With retarder

267/64.23 ... Having flexible wall

267/64.24 Including rolling lobe between telescoping

members

2 267/64.27 (0 OR, 2 XR)

Class 267: SPRING DEVICES

267/2 VEHICLE

267/64.11 .Comprising compressible fluid

267/64.27 ...Having flexible wall

2 277/646 (1 OR, 1 XR)

Class 277 : SEAL FOR A JOINT OR JUNCTURE

277/590 SEAL BETWEEN FIXED PARTS OR STATIC CONTACT

AGAINST RELATIVELY MOVABLE PARTS

277/628 .Contact seal for other than internal

combustion engine, or pipe, conduit, or cable

277/644 ...Particular cross-sectional seal profile

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10724759 CLSTITLES
       277/645 ...Hollow or filled chamber
                     ....Inflatable
        277/646
                (0 OR, 2 XR)
2 277/653
               277 : SEAL FOR A JOINT OR JUNCTURE
       Class
                     SEAL BETWEEN FIXED PARTS OR STATIC CONTACT
        277/590
                            AGAINST RELATIVELY MOVABLE PARTS
                     .Contact seal for other than internal
        277/628
                           combustion engine, or pipe, conduit, or cable
                     ..Particular sealing material or construction
        277/650
                     ...Distinct sheath or covering
        277/652
                   ....Metal
        277/653
                 (0 OR, 2 XR)
2 277/919
               277 : SEAL FOR A JOINT OR JUNCTURE
        Class
                     SEAL INCLUDING ELECTRICAL FEATURE
        277/919
                (0 OR, 2 XR)
 277/920
                277 : SEAL FOR A JOINT OR JUNCTURE
        Class
                     SEAL INCLUDING ELECTROMAGNETIC SHIELDING
        277/920
                        FEATURE
                (0 OR, 2 XR)
  277/921
                277 : SEAL FOR A JOINT OR JUNCTURE
        Class
                     CLOSURE OR WEATHER STRIP SEAL
        277/921
  280/732
                (1 OR, 1 XR)
                280 : LAND VEHICLES
        Class
        280/29
                     WHEELED
                      .Attachment
        280/727
                      .. Inflatable passenger restraint or confinement
        280/728.1
                          (e.g., air bag) or attachment
                      ...Deflated confinement located in or on
        280/732
                        instrument panel
2 280/741
                 (0 OR, 2 XR)
                280 : LAND VEHICLES
        Class
                   · WHEELED
        280/29
        280/727
                     .Attachment
                      .. Inflatable passenger restraint or confinement
        280/728.1
                          (e.g., air bag) or attachment
        280/741
                      ...Inflation fluid source
  384/100
                 (1 OR, 1 XR)
                384 : BEARINGS
        Class
                     ROTARY BEARING
        384/91
        384/100
                     .Fluid bearing
                 (0 OR, 2 XR)
  415/191
              415 : ROTARY KINETIC FLUID MOTORS OR PUMPS
                      WORKING FLUID PASSAGE OR DISTRIBUTING MEANS
        415/182.1
                            ASSOCIATED WITH RUNNER (E.G., CASING, ETC.)
                      .Plural distributing means immediately upstream
        415/183
                           of runner
```

runner axis

... Vanes

415/185

415/191

..Arcuately or circularly arranged around

```
(0 OR, 2 XR)
   415/209.2
                 415 : ROTARY KINETIC FLUID MOTORS OR PUMPS
         Class
                       WORKING FLUID PASSAGE OR DISTRIBUTING MEANS
         415/182.1
                              ASSOCIATED WITH RUNNER (E.G., CASING, ETC.)
         415/208.1
                        .Vane or deflector
                        ..Plural and arcuately or circularly arranged
         415/208.2
                            in radial plane around runner axis
                        ... Having means for mounting diaphragm or
         415/209.2
                           plural vane holder to casing
                   (0 OR, 2 XR)
 2 415/209.3
                  415 : ROTARY KINETIC FLUID MOTORS OR PUMPS
                        WORKING FLUID PASSAGE OR DISTRIBUTING MEANS
         415/182.1
                              ASSOCIATED WITH RUNNER (E.G., CASING, ETC.)
                        .Vane or deflector
         415/208.1
                        ..Plural and arcuately or circularly arranged
         415/208.2
                            in radial plane around runner axis
         415/209.3
                        ... Having specific vane mounting means
                   (2 OR, 0 XR)
   435/290.1
                  435 : CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY
         Class
         435/283.1
                        APPARATUS
         435/289.1
                        .Bioreactor
         435/290.1
                        ..Composting apparatus
                   (2 OR, 0 XR)
 2 439/139
                  439 : ELECTRICAL CONNECTORS
         Class
                        WITH CONTACT PREVENTER OR RETRACTABLE COVER
          439/135
                               PART
                        .Movably mounted
          439/136
                        .. Moved by mating connector
          439/137
                        ... Moved about an axis
          439/138
                        ....Connector moved rectilinearly for
          439/139
                           engagement, preventer or cover moved about axis parallel
to
                           direction of connector movement
    473/354
                   (0 OR, 2 XR)
                  473 : GAMES USING TANGIBLE PROJECTILE
          Class
          473/131
                        GOLF
          473/351
                        .Ball
          473/354
                        ..Liquid interior
                   (0 OR, 2 XR)
    473/370
                  473 : GAMES USING TANGIBLE PROJECTILE
          Class
                        GOLF
          473/131
          473/351
                        .Ball
                        .. Interior includes injected or compressed
          473/367
                            material
                        ...Diverse layer between shperical core and
          473/370
                           cover
                   (2 OR, 0 XR)
  2 473/374
                  473 : GAMES USING TANGIBLE PROJECTILE
          Class
          473/131
                        GOLF
          473/351
                        .Ball
                        ..Particular unitary or layered construction
          473/371
                        ...Diverse layer between spherical core and
          473/374
```

cover

Cla		SYNTHETIC RESINS OR NATURAL RUBBERS PART OF THE CLASS 520 SERIES
524	/908	COMPOSITION HAVING SPECIFIED SHAPE, E.G., ROD, STICK, OR BALL, ETC., AND OTHER THAN SHEET, FILM, OR FIBE
R		
2 525/232 Cla		SYNTHETIC RESINS OR NATURAL RUBBERS PART
525	/50	OF THE CLASS 520 SERIES .MIXING OF TWO OR MORE SOLID POLYMERS; MIXING OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING OF
SICP		MITTU AN ETHVIENTE ACENT. MIVING OF COLID DOLVMED MITTU
A		WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WITH
		CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES OF FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY O
F THE		ABOVE OPERATIONS
525	/55	At least one solid polymer derived from
525	/191	ethylenic reactants onlyPolymer mixture of two or more solid polymers derived from ethylenically unsaturated reactant
s		only; or mixtures of said polymer mixture with a chemica
1		Only, or mixtures of said polymer mixture with a chemica
37		treating agent; or products or processes of preparing an
У 525	/232	of the above mixturesSolid polymer derived from reactant containing at least two ethylenic groups and is devoid of aryl ring
2 525/236 (0 OR, 2 XR)		
Cla	ss 525 :	SYNTHETIC RESINS OR NATURAL RUBBERS PART OF THE CLASS 520 SERIES
525	/50	.MIXING OF TWO OR MORE SOLID POLYMERS; MIXING OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING OF
SICP		
A		WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WITH
		CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES OF FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY
OF THE		ABOVE OPERATIONS
525	/55	At least one solid polymer derived from ethylenic reactants only
525	/191	Polymer mixture of two or more solid polymers derived from ethylenically unsaturated reactan
ts		
al		only; or mixtures of said polymer mixture with a chemic
73.7		treating agent; or products or processes of preparing a
ny 525	/232	of the above mixturesSolid polymer derived from reactant
		Page 7

containing at least two ethylenic groups and is devoid o f aryl ringAt least two polymers derived from 525/236 reactants containing two or more ethylenic groups and devoid of an aryl ring (0 OR, 2 XR) 2 525/237 525 : SYNTHETIC RESINS OR NATURAL RUBBERS -- PART Class OF THE CLASS 520 SERIES 525/50 .MIXING OF TWO OR MORE SOLID POLYMERS; MIXING OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING O F SICP WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WIT нА CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES O FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY OF THE ABOVE OPERATIONS 525/55 ..At least one solid polymer derived from ethylenic reactants only 525/191 ...Polymer mixture of two or more solid polymers derived from ethylenically unsaturated reacta nts only; or mixtures of said polymer mixture with a chemi cal. treating agent; or products or processes of preparing any of the above mixtures 525/232 Solid polymer derived from reactant containing at least two ethylenic groups and is devoid of aryl ringAt least two polymers derived from 525/236 reactants containing two or more ethylenic groups and devoid of an aryl ring 525/237At least one of these polymers is derived from two or more reactants (0 OR, 2 XR) 2 D23/366 D23 : ENVIRONMENTAL HEATING AND COOLING; FLUID Class HANDLING AND SANITARY EQUIPMENT D23/314 HEATING OR COOLING

10724759 CLSTITLES

.Air treatment

..Deodorizer or ozonizer (28)

D23/355

D23/366